TABLE I-1. Preseason adult Chinook salmon stock forecasts in thousands of fish. (Page 1 of 3)

Production Source and Stock or Stock Group	2003	2004	2005	2006	2007	2008	2009	2010	2011	Methodology for 2010 Prediction and Source
Sacramento Index										
Fall	-	-	-	-	-	54.6[a/]	122.2	245.5	729.9	Linear regression analysis of jack escapement on SI of the following year. STT
Klamath River (Ocean Abundance)										
Fall	310.2	216.3	239.8	110.0	546.2	190.7	505.7	331.5	371.1	Linear regression analysis of age-specific ocean abundance estimates on river runs of same cohort. KRTT.
Oregon Coast										
North and South/Local Migrating										None.
Columbia River (Ocean Escapement)										
Upriver Spring	145.4	360.7	254.1[b/]	88.4	78.5	269.3	298.9	470.0	198.4	Age-specific linear regressions of cohort returns in previous run years. WDFW staff.
Willamette Spring	109.8	109.4	116.9	46.5	52.0	34.0	37.6	62.7	104.1	Age-specific linear regressions of cohort returns in previous run years. ODFW staff.
Sandy Spring	4.8	5.2	7.4	8.2	7.9	6.8	5.2	3.7	5.5	Recent year average. ODFW staff.
Cowlitz Spring	4.9	15.9	12.7	3.0	6.4	5.2	4.1	12.5	6.6	Age-specific linear regressions of cohort returns in previous run years. WDFW.
Kalama Spring	3.6	6.0	4.5	1.5	4.0	3.7	0.9	0.9	0.6	Age-specific linear regressions of cohort returns in previous run years. WDFW.
Lewis Spring	3.1	5.4	7.6	1.8	5.9	3.5	2.2	6.0	3.4	Age-specific linear regressions of cohort returns in previous run years. WDFW.
Upriver Summer	87.6	102.8	62.4[b/]	49.0	45.6	52.0	70.7	88.8	91.1	Age-specific average cohort ratios/cohort regressions. Columbia River TAC subgroup and WDFW
URB Fall	280.4	292.2	352.2	253.9	182.4	162.5	259.9	310.8	398.2	Age-specific average cohort ratios/cohort regressions. Columbia River TAC subgroup and WDFW
SCH Fall	96.9	138.0	114.1	50.0	21.8	87.2	59.3	169.0	116.4	Age-specific average cohort ratios/cohort regressions. Columbia River TAC subgroup and WDFW
LRW Fall	24.6	24.1	20.2	16.6	10.1	3.8	8.5	9.7	12.5	Age-specific average cohort ratios/cohort regressions. Columbia River TAC subgroup and WDFW
LRH Fall	115.9	77.1	74.1	55.8	54.9	59.0	88.8	90.6	133.5	Age-specific average cohort ratios/cohort regressions. Columbia River TAC subgroup and WDFW
MCB Fall	104.8	90.4	89.4	88.3	68.0	54.0	94.5	72.6	100.0	Age-specific average cohort ratios/cohort regressions. Columbia River TAC subgroup and WDFW

TABLE I-1. Preseason adult Chinook salmon stock forecasts in thousands of fish. (Page 2 of 3)

Production Source and Stock or Stock Group		2003	2004	2005	2006	2007	2008	2009	2010	2011	Methodology for 2010 Prediction and Source
Washington Coast (Ocean Escapement)											
Willapa Bay Fall	Natural	2.4	4.1	3.2	2.0	2.0	2.5	2.0	2.0	4.3	Based on average 1999-2007 returns/spawner applied to Brood Years 2005-2008. WDFW
	Hatchery	14.2	14.7	17.4	29.8	29.8	27.0	34.8	31.1	32.5	Based on average 1998-2007 returns/release applied to Brood Years 2005-2008, adjusted by model performance. WDFW staff.
Quinault Spring/Summer	Natural	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Quinault Fall	Natural	2.0	2.2	3.9	8.7	7.3	3.7	6.9	7.6	NA	Return per spawner by age with a 5 year adjusted average adjusted with brood year sibling return.
	Hatchery	1.0	2.9	6.2	7.3	8.7	1.3	7.8	5.5	NA	Recent 5 year average return per spawner
Queets Spring/Summer	Natural	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	NA	Recent 5 year average
Queets Fall	Natural	4.5	4.4	4.3	3.5	2.6	3.5	4.5	4.1	NA	Return per spawner by age with a 5 year adjusted average adjusted with brood year sibling return.
	Hatchery	0.4	0.7	1.2	1.4	1.5	7.0	1.2	9.8	NA	Recent 5 year average return per spawner
Hoh Spring/Summer	Natural	1.9	1.5	1.5	1.4	1.6	0.9	1.1	0.8	1.0	Forecast from returns per spawner using recent 5 year mean.
Hoh Fall	Natural	3.1	4.2	3.8	4.0	2.7	2.9	2.6	3.3	2.9	Forecast from returns per spawner using recent 5 year mean.
Quillayute Spring	Hatchery	1.0	1.4	1.2	1.7	1.3	1.7	2.0	1.5	1.4	Mean return per release using most recent 4 years, 5 year adjusted means for age-5 and age-6.
Quillayute Summer/Fall	Natural	7.4	7.8	6.7	6.8	7.7	6.0	6.8	7.5	8.8	Summer: Recent 5 year mean return per spawner. Fall: Returns per spawner mean recent 5 years.
Puget Sound summer/fall[c/]											
Nooksack/Samish	Hatchery	45.8	34.2	19.5	16.9	18.8	35.3	23.0	30.3	37.5	Brood release times average return/release rate (2007-2009 return years).
East Sound Bay	Hatchery	1.6	0.8	0.4	0.4	0.4	0.8	0.1	2.3	0.4	Brood release times 50% average return/release rate (2006 - 2009 return years)for Nooksack/Samish.
Skagit	Natural	13.7[d/]	20.4[d/]	23.4[d/]	24.1[d/]	15.0[d/]	23.8[d/]	23.4[d/]	13.0[d/]	14.5[d/]	Age-specific average return rate per spawner adjusted with brood year sibling return method.
	Hatchery	0.0[d/]	0.5[d/]	0.7[d/]	0.6[d/]	1.1[d/]	0.7[d/]	0.6[d/]	0.9[d/]	1.5[d/]	Age-specific average return rate per smolt and appropriate year smolt releases.
Stillaguamish	Natural	2.0[e/]	3.3[e/]	2.0[e/]	1.6[e/]	1.9[e/]	1.1[e/]	1.7[e/]	1.4[e/]	1.8[e/]	Natural plus supplemental production from average of FRAM CWT reconstruction and an independent environmental model to link to return rates of specific age classes. FRAM CWT reconstruction uses BY 1993-2003 tagged fish survival rates for supplemental forecast, and BY 1986-1993 recruits/spawner for the natural return.
Snohomish	Natural	5.5[e/]	15.7[e/]	14.2[e/]	8.7[e/]	12.3[e/]	6.5[e/]	8.4[e/]	9.9[e/]	7.4[e/]	Recent year average brood recruits/spawner applied to the 2006-2009 parent escapements. Hatchery forecasts based on average CWT survival rates (yearlings: BY 1996-97; fingerlings: BY 2000-2003) from Wallace Hatchery applied to releases .
	Hatchery	9.4[e/]	10.1[e/]	9.9[e/]	9.6[e/]	8.7[e/]	8.8[e/]	4.9[e/]	5.6[e/]	5.2[e/]	Yearlings based on CWT groups for Wallace Hatchery (BYs 1987 and 1992-1996). Fingerlings based on survival estimate from Tulalip Hatchery 1998-2003.

TABLE I-1. Preseason adult Chinook salmon stock forecasts in thousands of fish. (Page 3 of 3)

Production Source and Stock or Stock Group		2003	2004	2005	2006	2007	2008	2009	2010	2011	Methodology for 2010 Prediction and Source
Tulalip	Hatchery	6.0[e/]	7.6[e/]	9.2[e/]	10.0[e/]	8.1[e/]	4.1[e/]	4.0[e/]	3.4[e/]	3.5[e/]	CWT survival rates (1998-2003) multiplied by release numbers for brood years 2006-2009.
South Puget Sound	Natural	19.6	17.5	17.7	21.3	17.0	21.1	17.2	12.7	8.9	Puyallup R. recent five year average return per spawner applied to brood years contributing ages 3-6. For Nisqually, recent 5 year average (2004-2009 return years) of runsizes. Green R. spawning escapement in terms of natural origin adults.
	Hatchery	86.6	86.5	83.1	85.8	92.1	101.3	93.0	97.4	118.6	Average return at age multiplied by cohort release for Green, Carr Inlet, and Area 10E. Nisqually based on return rates/realease for age-3 -5.
Hood Canal	Natural	3.6[d/]	2.4[d/]	3.1[d/]	2.5[d/]	3.8[d/]	2.6[d/]	2.5[d/]	2.4[d/]	2.2[d/]	Natural fish based on the Hood Canal terminal run reconstruction-based relative contribution of the individual Hood Canal management units in the 2007-2010 return years.
	Hatchery	30.2[d/]	27.2[d/]	27.5[d/]	27.7[d/]	43.6[d/]	34.2[d/]	40.1[d/]	42.6[d/]	38.4[d/]	Brood 2007 fingerling lbs released from WDFW facilities in 2008, multiplied by the average of postseason estimated terminal area return rates (total terminal run / hatchery fingerling lbs released three years previous) for the last four return years (2007-2010).
Hoko	Natural	-	-	-	-	-	1.1[e/]	1[e/]	1.8[e/]	.6[e/]	Sibling regressions.
Strait of Juan de Fuca Including Dungeness spring run	Natural	3.4[d/]	3.6[d/]	4.2[d/]	4.2[d/]	4.4[d/]	3.2[d/]	2.4[d/]	1.9[d/]	2.5[d/]	Dungeness and Elwha hatchery estimated by four-year average releases times average return rates. Dungeness wild estimated by smolts times average hatchery return rate. Elwha estimate separates hatchery and wild fish based on otolith sampling.
	Hatchery	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Hatchery production included in naturals.

a/ Does not include the river harvest component. SI forecasts after 2008 include river harvest.

b/ Beginning in 2005, the upriver spring/summer designation was changed, with stream type Snake Basin summer fish being combined with the spring stock.

c/ Unless otherwise noted, forecasts are for Puget Sound run size (4B) available to U.S. net fisheries. Does not include fish caught in troll and recreational fisheries.

d/ Terminal run forecast.

e/ Expected spawning escapement without fishing.